

Project: Mid-Columbia River National Wildlife Refuge Complex (MCRNWRC) FY 2011 Invasive Species Management with Volunteers

Refuges: Toppenish National Wildlife Refuge

Project Description: The Mid-Columbia River National Wildlife Refuge Complex in cooperation with the Yakama Nation is proposing to control invasive species on Toppenish NWR and adjacent lands owned and managed by the Yakama Nation. This project would focus on 10 different invasive plants identified as priority species in the South Central Washington Coordinated Weed Management Area in Yakima and Klickitat Counties, of which Toppenish NWR and the Yakama Nation are members. The Coordinated Weed Management Area (CMWA) is a collaboration of 19 agencies and conservation organizations dedicated to manage, control, and prevent the spread of noxious weeds and displacement of natural ecosystems in Yakima and Klickitat Counties. Key to accomplishing this purpose is a non-regulatory, voluntary partnership between agencies, conservation organizations, and interested private landowners. The driving force is collaboration with a mutual interest in increasing the effectiveness of invasive plant management in south-central Washington, and thus reducing the threat of invasive plant species to natural, economic, and cultural resources, as well as the human communities of the Yakima and Klickitat area.

The invasive plants identified include: Russian olive, Russian knapweed, diffuse knapweed, spotted knapweed, purple loosestrife, yellow starthistle, scotch, and Canada thistle, yellow flag iris, and perennial pepperweed. Additionally, nine priority species have been identified as Early Detection/Rapid Response. These include medusahead, yellow starthistle, scotch broom, false brome, purple starthistle, flowering rush, oriental clematis, velvetleaf, and leafy spruce.

Five hundred acres would be surveyed in 2011 for the possible presence of invasive species. Early Detection/Rapid Response elements are incorporated into the project. All areas would be mapped using standard GPS units. A collaboration of volunteers from several local groups and organizations would be the primary partner to this effort as they would provide volunteer assistance with the control efforts. Mapping and data management will be coordinated through volunteer assistance by Washington Department of Agriculture. Refuge staff and Yakama Nation staff will coordinate the control efforts and provide training to all of the volunteers. Control efforts would be accomplished using the most effective known techniques.

Friends Groups, Volunteers and Other Partners: Our primary partners in this effort would be the Friends of the Mid-Columbia River National Wildlife Refuge Complex, Yakima Valley Audubon Society, Heritage University, and Washington Native Plant Society. In addition, Refuge Youth Conservation Corps programs at Toppenish and Conboy Lake Refuges would be assisting with control efforts.

Public Outreach and/or Environmental Education: Outreach and environmental education efforts would occur during regular meetings of the CWMA, Friends, Native

Plant Society chapters, and Audubon chapters. In addition, Refuge staff and Friends members would be actively recruiting volunteers through local media sources within the communities of Toppenish and Yakima. Environmental education would be a major part of the three Youth Conservation Corps programs that would be assisting with this project.

Post-treatment Monitoring: Refuge staff, including the Youth Conservation Corps, and Yakama Nation staff will continue with post treatment monitoring. A report will document where all species occurred, control work occurred, what control actions were employed, hours expended, costs, etc.

Criteria for Project Success: Noxious weeds pose serious threats to natural, cultural, and economic resources in our region. Fish and wildlife habitats as well as unique plant species and communities are threatened by noxious weed populations. Farmlands, domestic livestock grazing, and the irrigation infrastructure necessary for agriculture in our arid climate are impacted by noxious weeds. Cultural plants, game and traditionally used materials can be displaced by weed infestations. Finally, human safety and aesthetics are impaired as noxious weeds can impair road safety and increase fire risk.

Cooperating organizations will benefit from addressing noxious weed threats that are adjacent to their borders and increasing their work capacity through joint projects or new funding opportunities. Partners in the CWMA understand that noxious weeds move across political boundaries. Partners have a desire to coordinate noxious weed work with neighbors, sharing information on priority weed species and collaborating on weed control projects. Funding for noxious weed control is limited for most organizations, and collaboration is way to extend available resources. Collaboration may open up new funding opportunities, and sharing information about existing opportunities may help partners to individually be more successful.

The overall design and therefore ultimate success of the project is based on the various elements of Early Detection/Rapid Response. We have incorporated outreach and educational efforts, proper surveying, mapping and monitoring components, immediate treatment actions, etc, in order to help ensure a high degree of success.

Budget: We are requesting \$12,450 to help complete this effort.

Volunteer Coordinator: \$4,800

GPS Units: \$3,700

Chemical: \$3,750 If funding is available an additional \$3,000+ could be used.

Digital Camera: \$200

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